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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,658	09/15/2000	Malcolm G. Smith SR.	5575 413436/080	2181

7590

09/10/2002

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EXAMINER

NOWLIN, APRIL A

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,658

Applicant(s)

SMITH ET AL

Examiner

April A. Nowlin

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed 13 June 2002.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 6-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanbe et al. (US 6,080,476).

Kanbe et al discloses a magnetic recording medium that may be in a form of card and magnetic recording system comprising:

a magnetic recording medium 4, which serves as a data storage device as recited in claim 11, adapted to interact with a magnetic head 1, which serves as a data processing station as recited in claim 11, the data storage device 4 including a glass substrate having a predetermined shape; and at least one layer of high density, high coercivity magnetic material for storing magnetic signals;

wherein the at least one magnetic material layer is a thin film layer of high density, high coercivity magnetic material having a predetermined magnetic field orientation for storing data;

wherein the substrate has two surfaces and a protective coating is applied to at least one of the two surfaces; and

wherein the substrate is substantially planar and generally rectangular in shape and the data storage device is generally rectangular in shape.

Re claims 7, 17, and 54, wherein the data processing station is moved relative to the substrate (see col. 6, lines 37-38).

Re claim 21, wherein the at least one thin film layer of high density, high coercivity magnetic material is a sputtered layer. (see col. 9, lines 1-2)

Re claim 22, wherein the at least one thin film layer of high density, high coercivity magnetic material is a plated layer. (see col. 8, lines 61-64)

Re claim 23, wherein the at least one thin film layer of high density, high coercivity magnetic material is an oxide layer. (see col. 2, lines 5-7)

Re claim 28, the system further comprises a first transducer for reading magnetically encoded signals from the recording medium and a second transducer for writing magnetically encoding signals in the recording medium. (see col. 6, lines 33-40)

Re claim 29, wherein the transducer is an inductive head (see col.1, lines 8-15).

Re claim 30, wherein the transducer is a thin film magnetic head (see col.1, lines 8-15).

Re claim 38, the system comprises a magnetic transducer positioned relative to a surface of the recording medium for transferring signals with respect to the recording medium and a drive member operatively coupled to the transducer. (see col. 6, lines 37-38 and col. 8, lines 1-3)

Kanbe et al fails to teach or fairly suggest a) a substrate is moved relative to a data processing station; and b) a data processing station and a substrate are moved relative to each other. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a) a substrate which is movable relative to a data processing station or b) a data processing station and a substrate movable relative to each other, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Thus, it would have been an obvious expedient to provide either feature, as it would have been a matter of design choice of the manufacturer.

Furthermore, Kanbe et al fails to teach or fairly suggest a data storage device being configured to be used in an environment wherein particles and debris may become affixed to the surface region of the data storage device and the surface region is capable of having such particles and debris removed therefrom. The Examiner takes Official Notice that it is well known in the art for data storage devices to be used in an environment where particles and debris such as dust, dirt, and water can become affixed to the surface region of the data storage device and wherein the surface region is capable of having such particles and debris removed therefrom. For example, a brush or a finger of an individual is capable of removing such particles and debris from the surface region.

4. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanbe et al (US 6,080,476) in view of Hashimoto et al (US 4,756,967). The teachings of Kanbe et al have been discussed above.

Kanbe et al fails to teach or fairly suggest a magnetic recording medium having a layer of magnetic material formed of nickel-cobalt.

Hashimoto et al discloses a magnetic recording medium having a layer of magnetic material formed of nickel-cobalt. In view of Hashimoto et al's teaching, it would have been obvious to artisan of ordinary skill in the art at the time the invention was made to employ a layer of magnetic material formed of nickel-cobalt to the teachings of Kanbe et al for the purpose of improving the signal to noise ratio, reducing the intrinsic media noise at high linear recording density.

Response to Arguments

5. Applicant's arguments filed 13 June 2002 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., removing the magnetic recording medium from an enclosed environment for use in an external environment) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that "said data surface region being configured to be used in an environment wherein particles and debris may become affixed to the data storage region and said data storage region is capable of having

such particles and debris removed therefrom”, the examiner believes that it is well known in the art to have particles and debris becoming affixed to a data surface region and wherein the particles and debris is capable of being removed from the data surface region as discussed above in paragraph 3.

In response to applicant’s argument that the magnetic recording medium of Kanbe et al, wherein the medium is in the form of a disk, does not function as a data storage card, the examiner believes that the magnetic recording medium of Kanbe et al does function as a data storage card because they both are capable of storing data, having data read from their storing section, and having data written to their storing section.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to April A. Nowlin whose telephone number is (703) 605-1219. The examiner can normally be reached on Monday - Friday from 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7382 for After Final communications.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [april.nowlin@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Art Unit: 2876

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AAN

AAN

August 29, 2002

Karl D. Frech

KARL D. FRECH
PRIMARY EXAMINER